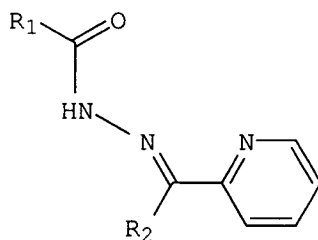


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue suitable for use as an *in vivo* iron chelator, the PCIH analogue having Formula 1:



Formula 1

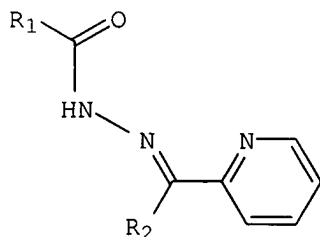
wherein R1 is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine, or hydroxyl attached to any of the vacant positions on the ring and R2 is either H or OH; isomers thereof; or salts thereof.

2. (Original) The PCIH analogue according to claim 1 wherein R<sub>1</sub> is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine or hydroxyl attached to any one of the vacant positions on the ring.

3. (Canceled)

4. (Currently amended) The PCIH analogue according to claim 1 selected from the group consisting of 2-pyridylcarboxaldehyde m-bromobenzoyl hydrazone (PCBBH), 2-pyridylcarboxaldehyde p-aminobenzoyl hydrazone (PCAH), 2-pyridylcarboxaldehyde p-hydroxybenzoyl hydrazone (PCHH), 2-pyridylcarboxaldehyde 2-thiophenecarboxyl hydrazone (PCTH), salts thereof, and isomers thereof.

5. (Previously presented) A pharmaceutical composition suitable for use as an iron chelator comprising a therapeutically effective amount of at least one 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue having Formula 1:



Formula 1

wherein R1 is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine, or hydroxyl attached to any of the vacant positions on the ring and R2 is either H or

OH; isomers thereof or salts thereof together with a pharmaceutically suitable carrier or diluent.

6. (Original) The pharmaceutical composition according to claim 5 wherein the aromatic or heterocyclic group is hydrophobic.

7. (Canceled)

8. (Currently amended) The pharmaceutical composition according to claim 5 wherein the 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue is selected from the group consisting of 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH), 2-pyridylcarboxaldehyde 2-thiophenecarboxyl hydrazone (PCTH), 2-pyridylcarboxaldehyde benzoyl hydrazone (PCBH), 2-pyridylcarboxaldehyde m-bromobenzoyl hydrazone (PCBBH), 2-pyridylcarboxaldehyde p-aminobenzoyl hydrazone (PCAH), 2-pyridylcarboxaldehyde p-hydroxy benzoyl hydrazone (PCHH) salts thereof, and isomers thereof.

9. (Previously presented) The pharmaceutical composition according to claim 5 formulated for subcutaneous or intravenous injection, oral administration, inhalation, transdermal application, or rectal administration.

10. (Previously presented) A method of iron chelation therapy comprising administering to a patient a pharmaceutical composition claim 5.

11. (Previously presented) A method of treating an iron-overload disease in a subject, the method comprising administering to a subject a pharmaceutical composition according to claim 5.

12. (Original) The method according to claim 10 or 11 wherein the pharmaceutical composition is administering in a dosage regimen of 30 - 50 mg per kg of body weight of the patient.

13. (Original) The method according to claim 12 wherein the dosage regimen is 50 - 100 mg per kg of body weight.

14. (Previously presented) The method according to claim 10 wherein the patient suffers from  $\beta$ -thalassemia or Friedreich's ataxia.

15. (Canceled)